

Alliance of Automobile Manufacturers Response to Request from Congressman Dingell

As an introduction, it is the view of the Alliance of Automobile Manufacturers that any policy to reduce greenhouse gas (GHG) emissions must focus on all sectors of the economy. To be successful in the United States, a program to carry out such a policy must be highly efficient and cost-effective.

A national program should also encompass regular benchmarking to assure that U.S. efforts reflect a fair proportion of the international contributions to GHG. This requires reasonable emissions constraints by other nations, including developing countries.

Automakers have strong market-driven, competitive reasons to make alternative fuel vehicles and have invested billions of dollars developing autos to run on alternative fuels like clean diesel, ethanol, hydrogen and compressed natural gas or that use hybrid technology. It is important that any program, including cap-and-trade, work with and not against these market forces.

1. Please outline which issues should be addressed in the Committee's legislation, how you think they should be resolved, and your recommended timetable for Congressional consideration and enactment. For any policy recommendations, please address the impacts you believe the relevant policy would have on:

(a) Emissions of greenhouse gases and the rate and consequences of climate change; and

(b) The effects on the U.S. economy, consumer prices, and jobs.

As part of any effort to reduce GHGs and minimize the consequences of climate change, Congress should seek to implement policies and programs that are highly efficient and cost-effective. It is neither if one sector is regulated alone.

As of today, Automakers are the only carbon-constrained industry in the U.S. economy. Congress enacted the 1975 Energy Policy and Conservation Act to establish the Corporate Average Fuel Economy (CAFE) program and reduce petroleum imports by, among other things, improving automobile fuel economy. CAFE alone cannot achieve this goal. Even though we are committed to increasing the fuel efficiency of new motor vehicles, a much broader policy must be developed to address reduction of GHGs from carbon-based fuels and to increase development and use of alternative fuels and energy.

| A - policy with the goal of reducing GHGs and the rate and consequences of climate change must start with fuel producers and end with fuel users (whether they are auto manufacturers or the average consumer).

Programs to reduce GHG emissions should address the current and projected availability and uses of carbon-based and non-carbon-based fuels, the fuels infrastructure, research and development, and the impacts on carbon users and other stakeholders.

Congress has recognized since the Byrd-Hagel Resolution and its “Sense of the Senate” in 1997 that the impact on the U.S. economy must be considered as part of any legislative mandate or legislation enacted, especially if legislation “...would result in serious harm to the economy...”

2. One particular policy option that has received a substantial amount of attention and analysis is “cap-and-trade.” Please answer the following questions regarding the potential enactment of a cap-and-trade policy:

a. Which sectors should it cover? Should some sectors be phased-in over time?

If a cap-and-trade program is considered, the Alliance’s position is that the program must be administered at the federal level. All stakeholders, including Automakers, need a consistent and comprehensive national approach and not a policy that can be superseded by a single state or a group of states. A patchwork of state and local GHG emission reduction programs would result in marketplace chaos for many industries and the U.S. economy as a whole. Minimizing the consequences of climate control is a problem that can only be addressed with a comprehensive, federal and economy-wide program.

All sectors throughout the U.S. economy must share responsibility for reducing GHGs and minimizing the consequences of climate change. The further upstream a cap-and-trade program is introduced to reduce GHG emissions, the more efficient and effective it is in reducing GHG emissions and, as a result, minimizing the consequences of climate change. The lowest cost system to administer is one that regulates the production and importation of carbon-based fuels (coal, natural gas, petroleum) or what economists call an “upstream” approach.

Upstream, there are fewer but larger sources of CO₂. For example, a single “upstream” fuel producer and “midstream” user such as a small electric utility, with a 1,000 MW coal-fired plant, emits approximately 6,200,000 metric tons of CO₂ eq. per year based on a 75% capacity factor, while a “downstream” user such as an average automotive assembly plant may emit approximately 200,000 metric tons of CO₂ eq. per year.

An “upstream” cap-and-trade program to reduce GHG emissions, ultimately, will impact all sectors of the U.S. economy since it would cause the price of carbon-based fuels to rise, resulting in higher costs for manufacturers and downstream users of carbon fuels. In practice, these higher costs and the resulting fuel efficiency and conservation end up being more efficiently and equitably distributed among all energy users, and much more so, than a program applied only to the manufacturing sector. In the transportation sector, all mobile sources are users and not producers

of carbon-based fuel, and as such, would not be regulated directly under a cap-and-trade program on fuel producers, except to pay the anticipated higher cost of carbon-based fuels and the initial introduction of alternative fuels or energy.

Such a program would result in market-based incentives for switching to non-carbon based alternative fuels and for reducing energy usage. Just as a homeowner's winter heating bill rises with the higher cost of natural gas or oil, so would the cost of manufactured goods (appliances, autos) and services (restaurants, retail stores, recreation sites) with a cap-and-trade program centered on carbon-based fuel sources and producers.

This kind of cap-and-trade program, along with tax incentives for more research and development and the building of an alternative fuel infrastructure, would drive the manufacturing and user competitive markets toward the goals of reducing GHG emissions and minimizing the consequences of climate change.

b. To what degree should the details be set in statute by Congress or delegated to another entity?

Congress should enact legislation that sets broad goals and establishes clear guidelines for regulatory action. As part of those goals, we believe Congress should set the upstream GHG emission reduction "caps" and "safety valve" parameters. We recommend that the mechanism of "trading" for the program, including any auction and allowance allocations, should be implemented by Federal agencies, which we believe are best suited to write regulations that consider technological feasibility and cost-effectiveness.

c. Should the program's requirements be imposed upstream, downstream, or some combination thereof?

If a cap-and-trade program is considered, it is the Alliance's position that an "upstream" program would be the most efficient and cost-effective approach. Under such a program, "downstream" energy users, including manufacturers, would be faced with higher carbon-based fuel costs. In combination with R&D and alternative fuel infrastructure tax incentives, the program would create incentives for all energy users in the economy to reduce their consumption of carbon-based fuels and to use more energy efficient products and alternative fuels.

d. How should allowances be allocated? By whom? What percentage of the allowances, if any, should be auctioned? Should non-emitting sources, such as nuclear plants, be given allowances?

To date, we have not attempted to develop the details of an equitable allocation program. However, we recommend these general principles:

- All sectors should develop a policy whose objective is the reduction of carbon emissions;

- The program should be a broad market-based solution with clear, transparent and consistent price signals; and,
- A federal regulatory agency is best equipped to determine the specifics of the allocation program based upon guidelines provided by Congress.

e. How should the cap be set (e.g., tons of greenhouse gases emitted, CO₂ intensity)?

A cap based on “CO₂ Intensity” would allow for industry growth with minimal economic harm to the country. Any cap also should be reviewed in light of parallel international emission reduction progress.

With either form of measurement, “safety valves” would be a critical component since they allow a re-assessment of the cap based on new economic and technical developments.

f. Where should the cap be set for different years?

The Alliance believes any cap-and-trade program should be phased in gradually over a period of years and should be based on sound scientific and economic principles. At a minimum, the program should allow all industries to react to it by adjusting their products and pricing for the end user. It also should include a “safety valve” so adjustments can be made in the cap during rapidly changing economic conditions or disruptions and the costs to consumers and businesses can be limited.

g. Which greenhouse gases should be covered?

All six major GHGs, resulting from human activity, should be covered under a comprehensive, multi-sector federal program. Besides carbon dioxide (CO₂), there is methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), HFCs and PFCs.

h. Should early reductions be credited? If so, what criteria should be used to determine what is an early reduction?

Early reductions should be credited as long as the changes can be substantiated; the details of early reduction credits must be carefully considered.

i. Should the program employ a safety valve? If so, at what level?

A “safety valve” mechanism should be part of any trade-and-cap legislation and regulation to allow for necessary adjustments in the cap under changing economic conditions or disruptions. Such a mechanism is critical and will help ensure that the US economy continues to grow and is not stunted during implementation of the program.

In the brief history of the European Union emissions trading scheme, which does not include automobiles, the price of carbon emission permits has been highly volatile¹. Permit prices under the U.S. acid rain Sulfur Dioxide cap-and-trade program have ranged from \$66 in 1997 to \$860 in 2006² in spite of a safety valve set by the Environmental Protection Agency (EPA) and not Congress. Such volatility can be very disruptive to business planning and the economy.

j. Should offsets be allowed? If so, what type of offsets? What criteria should govern the types of offsets that would be allowed?

Offsets provide important flexibility in a cap-and-trade program and should be designed to encourage voluntary actions.

k. If an auction or a safety valve is used, what should be done with the revenue from those features?

Any revenue from an auction or safety valve system should be directed toward R&D for low carbon alternative fuels and carbon reduction technologies as well as downstream conservation of all fuels.

k. Are there special features that should be added to encourage technological development?

The programs should identify and remove barriers to pursuing new R&D and implementing new technologies and should consider other financial incentives that may be effective in encouraging technological development. Consumers can be hesitant to purchase products and services with new technologies given their higher purchase price and the uncertainty of lifecycle costs. Tax credit provisions should be used to increase R&D for new technologies and encourage consumers to buy and use lower carbon fuels and products. Consumer tax incentive programs can accelerate both the production by manufacturers and the acceptance by consumers of low carbon alternative fuels and carbon reduction technologies and cause even more technological development in this area.

l. Are there design features that would encourage high-emitting developing countries to agree to limits on their greenhouse gas emissions?

Since some cost-effective energy reduction opportunities are found in developing countries, any U.S. cap-and-trade program that recognizes and allows participants to take advantage of those opportunities, would encourage developing country participation and could provide significant, cost-effective GHG emission reductions.

¹ European Energy Exchange, *EU Emission Allowances*, 2005, 2006, 2007.

² U.S. Environmental Protection Agency, *Clean Air Markets - Data and Publications*, 2005. See also, www.epa.gov/airmarkets/

3. How well do you believe the existing authorities permitting or compelling voluntary or mandatory actions are functioning? What lessons do you think can be learned from existing voluntary or mandatory programs?

The European Union (EU) has had a mandatory cap-and-trade emissions program in place since 2005. Initially, the price of CO₂ tripled and then fell just as quickly when participants realized the cap was not set low enough to create a genuine shortage. The European Commission is now reviewing each country's plans for allocating emission allowances for 2008. During review of the program's initial effectiveness, it was found that all but one nation had set the cap too high to comply with the Kyoto 2008-2012 list. To date, Europe has been unable to meet the Kyoto limits. In short, success of the EU program has been modest because of difficulties in setting the cap and allocating credits among participating nations and companies.

Voluntary programs have shown some promise in this area. Alliance members have participated since January 2003 in the Department of Energy (DOE) Voluntary GHG Registry Reporting Program (1605b), and the DOE Climate VISION Program, also known as the U.S. DOE Energy Business Challenge. These programs provide opportunities for companies voluntarily to report entity-wide GHG emissions and reductions or to register GHG emission reductions. Additional details are included in our answer to Question 5 below.

4. How should potential mandatory domestic requirements be integrated with future obligations the United States may assume under the 1992 United Nations Framework Convention on Climate Change? In particular, how should any U.S. domestic regime be timed relative to any international obligations? Should adoption of mandatory domestic requirements be conditioned upon assumption of specific responsibilities by developing nations?

The Alliance has no current position on these issues.

5. What, if any, steps have your organization's members or its individual members taken to reduce their greenhouse gas emissions? Which of these have been voluntary in nature? If any actions have been taken in response to mandatory requirements, please explain which authority (State, Federal, or International) compelled them?

INVESTMENT: Automakers have invested billions of dollars in research and development of energy-efficient technologies. The result has been an ever-increasing number of advanced technology and alternative fuel autos powered by electricity, biofuels, diesel, hydrogen and compressed natural gas. Automakers sold more than 1.5 million alternative fuel autos in 2006 and our goal is to sell even more in 2007. The introduction of advanced technology vehicles on U.S. roads can be accelerated through government incentives, including consumer tax incentives for the purchase of these autos. In 2007, Automakers are offering 60 models of alternative fuel autos for sale, including hybrids, diesel and ethanol-capable vehicles. See enclosed list. More information on these vehicles also is available at www.DiscoverAlternatives.com.

VOLUNTARY PROGRAMS: In the U.S. DOE “Climate VISION” Program, Alliance members voluntarily committed to the goal of reducing GHG emissions intensity by 10% from their U.S. automotive manufacturing facilities (i.e., CO₂ per number of vehicles produced) by 2012 from a base year of 2002. In 2005, Alliance members reduced absolute CO₂ emissions by 13.4% from 2002 levels. GHG emissions intensity also decreased by 2.8% in 2005 from 2002.

Alliance members engage in a number of public/private partnerships that focus on cost-effective energy efficiency and energy management projects. They have been the recipients of a variety of recent national and local awards and also are working individually at their facilities to reduce emissions, benefit the environment, and improve their energy and fuel use footprint.

In addition, members are implementing energy management programs that encompass energy efficiency improvements to automobile and light duty truck manufacturing, buildings and process equipment (e.g., increasing efficiencies for lighting, heating and cooling); conserving energy, electricity, and fuel demand; making process improvements; and recycling materials and packaging.

Alliance members participate in the Auto Sector activities under the Energy Star “Industries in Focus” Program, co-sponsored by EPA and DOE. In September of 2006, nine U.S. automobile assembly plants were the first recipients of the new “Energy Star Plant Award” in recognition of their energy-efficient operations that prevented GHG emissions. The energy performance scores for these plants were in the top 25 percent nationally. Only 8 facilities from all other manufacturing industries were recognized in the first year of the Energy Star Plant Award.

Automobile manufacturers coordinated with DOE, EPA and Lawrence Berkeley National Laboratory to develop the *Energy Star Guide, Energy Efficiency Improvement and Cost Saving Opportunities for the Vehicle Assembly Industry*, which has become a program model. Alliance members have been consistent recipients of the Energy Star Industrial Awards.

Automobile manufacturers also helped develop the *Energy Performance Indicator (EPI) Tool* to facilitate the ability for facilities to benchmark their energy usage, GHG reduction planning, conservation activities, efficiency improvements, changes in operating practices and employee awareness programs.

Under DOE’s Office of Energy Efficiency and Renewable Energy (EERE), Alliance members participate in the Office of Industrial Technology (OIT) energy efficiency and technology training events on various energy applications (pumping, steam, process heating, etc.) and co-sponsored energy efficiency applications (i.e., Rebuild America Program). Members also take advantage of site auditing and technical expertise provided by DOE. Various members also participate in the EPA Climate Leaders Program, Suppliers Partnership for the Environment (SP), and Landfill Methane Outreach Program (LMOP). Forest preservation and reforestation activities are also ongoing.

Both absolute emissions and emissions per vehicle produced (emissions intensity) of Alliance member companies dropped in each year through 2005 compared with the baseline year of CY 2002, as reflected in company reports to the DOE Section 1605(b) Voluntary GHG Registry as of December 2006. Reductions came as a result of each company's mix of energy, fuel use, and electricity use efficiency improvements, and operational and production changes.

REGULATORY PROGRAM: CAFE was created in response to the 1973-74 oil embargo. The Energy Policy Conservation Act (EPCA) was passed in 1975 to reduce petroleum imports by, among other things, improving automobile fuel economy. CAFE alone cannot achieve this goal.

When setting "maximum feasible" fuel economy standards for the nation, Congress required NHTSA to gather extensive data on technological feasibility, affordability, safety, emissions, consumer choice and effects on American jobs, and Automakers have made it a priority to work constructively with the agency, providing information necessary for NHTSA's evaluation. The Alliance continues to support a rulemaking process that is both open and transparent to the public.

There is an important balance that needs to be preserved when setting standards. A multi-year rulemaking can provide certainty to Automakers and can be an efficient way to conduct a rulemaking. However, the longer the rulemaking looks into the future, the greater the uncertainties. No one can predict the price of gas or consumer preferences or other important factors many years into the future.

Automakers have strong market-driven, competitive reasons to make alternative fuel vehicles and have invested billions of dollars developing autos to run on alternative fuels like clean diesel, ethanol, hydrogen and compressed natural gas or that use hybrid technology. Alternative fuel autos are the most effective way to reduce gallons of gasoline used by directly displacing petroleum, but without incentives for other stakeholders, the sales of these vehicles will be hindered by a lack of infrastructure and inadequate alternative fuel availability.

Attachment: Alliance Brochure, *Alternative Fuel Autos on Sale Now*